

TMDL Implementation Tracking

Current Status and Future Needs
EPA Regions 5, 9, and 10

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Presentation Overview

- Project Background
- Project Goals
- Summary of State Efforts
- Key Findings
 - Benefits of Tracking TMDL Implementation

Background

- Region 5 states expressed need to increase focus on tracking TMDL implementation efforts
- Importance of documenting and tracking implementation efforts:
 - Helps states and EPA assess progress towards meeting TMDL goals and achieving WQS
 - Provides EPA, states, and stakeholders with ability to better plan the use of limited resources towards watershed restoration

Project Goals

1. Assess current status of TMDL implementation tracking in nine states
 - Region 5: Illinois, Indiana, Michigan, Minnesota, Ohio, and Wisconsin
 - Region 10: Alaska and Washington
 - Region 9: New Mexico
2. Identify TMDL implementation tracking needs

Alaska

- Implementation Tracking Tool: **NO**
- Uses Excel spreadsheets and Access databases to manage basic info on state waters
 - No predefined indicators
 - Information tracked varies by waterbody
- Currently adding web-module to Alaska Clean Water Actions (ACWA) Database to track and manage information on Alaska's waters, including impaired waters and TMDL action

Illinois

- Implementation Tracking Tool: **NO**
- Resource Management Mapping System (RMMS)
 - Web-based GIS tool used to track information related to several programs and initiatives (e.g., 319, 303(d))
- Also has a web-based *Mapping Tool* that provides basic info on waterbody assessment and impairments
- State would like to integrate RMMS and the *Mapping Tool* with a tracking capability for implementation of TMDLs and other water quality restoration activities

Indiana

- Implementation Tracking Tool: **NO**
- Uses Excel and Access to track TMDL development
- Assessment Information Management Systems (AIMS) database used to track water quality and assessment data
- Some implementation tracking information maintained in paper files

Michigan

- Implementation Tracking Tool: **NO**
- State tracks 319 and other state grant info in a Microsoft SQL Server database
 - Project located with lat/long
 - Estimated load reductions tracked
- Also maintains NPDES Management System (NMS) to track permit status

Minnesota

- Implementation Tracking Tool: **YES**
- eLINK used to track implementation activities from multiple programs
 - Required for 319 and other grant recipients
- HYDSTRA stores stream data from multiple agencies
 - Graphically analyze and edit hydrologic data
 - Store and access digital photos, maps and other documents associated with streams
- Investigating use of Business Object Model (BOM) to track watershed restoration and TMDL implementation efforts
 - Working with Univ. of MN to hold focus groups to identify indicators for reporting restoration progress

New Mexico

- Implementation Tracking Tool: **NO**
- Due to consent order, focus has been on completing TMDLs
 - Limited focus on implementation
- 319 and other grants tracked through Excel spreadsheets
- Moving to watershed-based approach to restoration activities

Ohio

- Implementation Tracking Tool: **NO**
- Excel spreadsheets used to track accountability for implementing TMDL
 - Restoration actions not tracked
- Wants to link monitoring data with implementation activities (and restoration progress)
 - Interested in using biological indicators to track implementation progress

Washington

- Implementation Tracking Tool: **YES**
- Watershed Attainment Tracking System (WATS) used to track:
 - 305(b) and 303(d) info
 - TMDL prioritization
- TMDL Management System tracks:
 - Staff responsible for TMDL development and implementation
 - Status of TMDL development
 - NPDES permits impacted by TMDL
 - BMPs and other activities being implemented, including location, date, agency, cost

Wisconsin

- Implementation Tracking Tool: **YES**
- Recently appointed first TMDL Implementation Coordinator
- Water Assessment Tracking and Electronic Reporting System (WATERS) tracks:
 - Waterbody status
 - Pollutants
 - Impairments
 - Watershed planning recommendations
- WATERS being updated to better track TMDL implementation efforts
- Surface Water Integrated Monitoring System (SWIMS) used to track 319 grant info

Benefits of Implementation Tracking

- Ability to track and assess effectiveness of TMDL implementation activities
- Capacity to track activities performed by all agencies involved with implementing TMDLs
- Provides management with ability to review TMDL implementation progress
- Allows for the quick generation of reports on implementation progress for EPA, state legislature, and the public
- Supports cross-program coordination (e.g., TMDL, 319, NPDES, etc.)

Benefits of Implementation Tracking

- Shows link between funding, implementation activities, and water quality improvements.
- Enhances information sharing capabilities among Federal, state, and local agencies
- May be useful in helping to guide program direction
- Provides useful information for permit development and monitoring planning
- Supports watershed based management programs

Benefits of Implementation Tracking

- Tracking system could help states and EPA with national performance measure reporting needs
- National tracking would allow for assessment of TMDL implementation and waterbody restoration on various levels (state, region, national)

Challenges to Implementation Tracking

1. Funding

- To support:
 - Development and maintenance of a tracking system
 - Data entry and reporting
- Most states indicated 0.5 to 1.0 FTE necessary to support data entry, maintenance, and reporting

2. Compatibility

- If national system put in place, states with their own tracking systems concerned with potential need to establish interfaces for data exchange between state and national systems

Key Features of an Implementation Tracking Tool

- Ability to track and report on interim milestones for implementation and not just the end goal of achieving WQS
- Ability to track EPA-funded and non-EPA funded projects (e.g., Farm Bill projects)
- Ability to easily query and extract data for reporting purposes
- Ability to track both:
 - Programmatic Progress – Status of implementation of controls (e.g., permits) or restoration activities (e.g., BMPs)
 - Environmental Progress – Progress toward improving water quality
- Support ability to report on both qualitative and quantitative measures of success
- Web-based functionality

Recommended Next Steps

- Develop a workgroup comprised of state and EPA staff to:
 1. Further explore questions and issues about a national or regional tracking tool
 - Example: What would be the primary use(s) of a tracking tool?
 2. Clearly define the goals, objectives, and intended use(s) of a tracking system
 3. Identify indicators and benchmarks necessary for tracking the implementation of TMDLs and other water quality restoration efforts